CLAIMS

1. A device (D) for managing the measurement of parameters of end-to-end type data streams in a communication network (N) composed of at least two domains (Ai) coupled together, and each equipped with a measuring appliance (Mi) capable of delivering local measurements representing parameter values of local end-to-end data streams, where said measuring appliances (Mi) implement various measuring processes, characterised in that it includes (i) monitoring means (MM) arranged so as to order the constitution of a specific measurement configuration in each measuring appliance (Mi) as a function of at least its measuring process and overall measurement specifications, and (ii) calculation means (CM) arranged so as to deliver first data representative of parameter values of overall end-to-end data streams from local measurements delivered by the said configured measuring appliances (Mi).

2. A device as in claim 1, characterised in that said monitoring means (MM) are arranged so as to order the constitution of a specific measurement configuration in each measuring appliance (Mi) as a function of its measuring process, second data representing the arrangement of its domain and overall measurement specifications.

3. A device as in claim 1, characterised in that said monitoring means (MM) include the first interface means (ID) arranged to allow the definition of said overall measurement specifications.

4. A device as in claim 1, characterised in that said monitoring means (MM) include configuration means (MC) arranged to determine, for each measuring appliance (Mi), the local specifications of measurements defining its specific configuration to be constituted.

5. A device as in claim 4, characterised in that said monitoring means (MM) are arranged to determine the corresponding data representing the correspondence between said local measurement specifications and said overall measurement specifications.

6. A device as in claim 1, characterised in that said storage means (BD) define a first memory (B1) capable of storing data representing said overall measurement specifications.

7. A device as in claim 6, characterised in that said storage means

(BD) define a second memory (B2) capable of storing data representing said local measurement specifications and/or said configuration data.

8. A device as in claim 6, characterised in that in the presence of at least one domain (D1) which includes a measuring appliance (M1) implementing a measuring process based upon a measurement model, said storage resources (BD) define a third memory (B3) capable of storing the data representing said measurement model.

9. A device as in claim 4, characterised in that said calculation means (CM) include a main calculation module (CMP) arranged to determine said first data from local measurements delivered by said configured measuring appliances (Mi), said local measurement specifications and at least one value aggregation model.

10. A device or arrangement as in claim 9, characterised in that said main calculation module (CMP) is arranged to determine said first data from additional data.

11. A device as in claim 10, characterised in that said additional data define an aggregation model for additional values.

12. A device as in claim 9, characterised in that said second memory (B2) is capable of storing the data representing the said value aggregation model and/or of the said additional value aggregation model.

13. A device as in claim 8, characterised in that said main calculation module (CMP) is arranged to determine said first data from local measurements delivered by the said configured measuring appliances (Mi), the said local measurement specifications, at least one value aggregation model and at least one of said measurement models.

14. A device as in claims 10 and 13, characterised in that said additional data define an additional measurement model.

15. A device as in claim 14, characterised in that said third memory (B3) is capable of storing the data representing said measurement model and/or of the additional measurement model.

16. A device as in claim 4, characterised in that said calculation means (CM) include a auxiliary calculation module (CMA) arranged to determine second data representing the respective contributions of the various domains to the first data, from local measurement delivered by said configured measuring appliances (Mi) and said local measurement specifications.

17. A device as in claim 16, characterised in that said auxiliary calculation module (CMA) is arranged to determine second data representing relative contributions and/or absolute contributions.

18. A device as in claim 16, characterised in that said first memory (B1) is capable of storing said second data.

19. A device as in claim 6, characterised in that said first memory (B1) is capable of storing said first data.

20. A device as in claim 16, characterised in that it includes an output interface (IS) coupled to said calculation means (CM) and capable of delivering said first and/or second data at an output when so ordered.

21. A device or arrangement as in claim 16, characterised in that it includes an output interface (IS) which is capable of extracting the said first and/or second data from the first memory (B1) at an output when ordered to do so.

22. A device as in claim 20, characterised in that it includes a management information database (MIB) which is supplied with the first and/or second data by said output interface (IS).

23. A device as in claim 1, characterised in that it includes second interface resources (IC) arranged in the shape of interface modules (IMj), each dedicated to a measuring process, coupled to said monitoring means (MM) to said measuring appliances (Mi) and to said calculation means (CM), and each arranged to configure the corresponding measuring appliance (Mi) and to collect its local measurements in order to supply said calculation means (CM).

24. A device as in claim 23, characterised in that one of said interface modules (4) constitutes an external measuring appliance (M4) for a domain (A4) of said communication network (N).

25. A communication network (N) which includes at least two domains (Ai) coupled together and each equipped with a measuring appliance (Mi) capable of delivering local measurements representing the parameter values of local end-to-end streams, where said measuring appliances (Mi) implement different measuring processes, characterised in that it includes at least a management device (D) as in any of the claims 1 to 24.

26. Use of the management device (D) and the communication network (N) as in one of the previous claims in the network technologies which have to be managed.

27. Use as in claim 26, characterised in that said network

technologies are chosen from a group which includes transmission networks of the WDM, SONET or SDH type in particular, data of the IP-Internet or ATM type in particular, and speech of the conventional, mobile or NGN type in particular.